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Mineral Industry Surveys

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LEAD IN JANUARY 2005

Domestic mine production, based on the net quantity of lead recovered from concentrate, was 28,200 metric tons (t) in January, according to the U.S. Geological Survey. This was a decrease of about 11% compared with that of December 2004 and 16% lower than that of January 2004. Secondary refinery production (95,500 t) increased slightly in January, and reported consumption (114,000 t) was down about 2% from that of the previous month. When compared with that of January 2004, secondary production was up by 2% and reported consumption decreased by about 2% for the same period.

According to Platts Metals Week published quotations, the average North American producer price decreased slightly from that of the previous month to 60.66 cents per pound. The average London Metal Exchange Ltd. (LME) cash price decreased to $952.38 per metric ton, a 2% decline compared with the December price. These are significantly higher prices when compared with January 2004 averages, up about 29% and 26%, respectively. The LME January prices ranged from a low of $943.00 per metric ton (January 9) to a high of $1,056.00 per metric ton (January 31); in January, the lead prices traded above $1,000 only that one day. For the month of January, LME lead stocks dropped by 2,425 t to 40,475 t.

In North America, market supply remained limited, with lead producers reporting increased customer interest during January. In Europe, producers were reporting steady demand, with contracts in place and deliveries increasing. The European market was steady rather than spectacular, but any substantial increase in demand would be difficult to meet. In China, the supply of refined lead was sufficient, and the tight lead concentrate supply eased a bit (CRU International Ltd., 2005). These supply factors and limited decreases in prices indicated that lead prices in China were following the international market more closely (Antaike, 2005).

Preliminary Chinese refined lead metal production for 2004 was 1.75 million metric tons, up 8.2% compared with that of 2003. At the same time, mine production of lead concentrate was down by 5.4% (585,000 t). December imports of lead concentrate were 50,000 t, and for the entire year 831,000 t, up 22.3% compared with that of 2003 (Antaike, 2005). U.S. Census Bureau data indicated that companies in the United States shipped approximately 97,980 t of lead contained in concentrates (12% of China's total concentrate imports). These U.S. exports were further broken down by 68,590 t shipped from New Orleans (Missouri mines), 28,590 t shipped from Anchorage (Red Dog Mine), and 800 t shipped from New York.

China's exports of automobile-related products in 2004, a broad category including starting-lighting-ignition (SLI) batteries, totaled $8.16 billion, up 73% from that of 2003. Chinese imports of auto products rose by only 13% in 2004 (Ryan's Notes, 2005b).

China held its first recycling forum in December. Speakers pointed out that China obtained less than 20% of its total refined lead production from secondary sources, while developed countries averaged between 50 to 60%. North America and Europe obtained over 70% of total refined production from secondary sources. There was an estimated minimum 500,000 t of scrap batteries available annually in China (CRU International Ltd., 2005).

North American shipments of SLI batteries in October and November were down for both replacement and original equipment batteries. Replacement SLI battery shipments in November (7,476,810) were down 6.7% when compared with those of October, and October shipments (8,014,659) were down 7.8% compared with those of September. Original equipment SLI battery shipments in November (1,639,606) were down 8.4% when compared with those of October, and October shipments were down 7.2% compared with those of September. Despite slipping these 2 months, both replacement and original equipment SLI battery shipments were up for the first 11 months of 2004 (82,383,810, up 2.6%, and 19,184,731, up 6.1%, respectively) (Ryan Notes, 2005a).

Doe Run Peru's polymetallic smelter in the town of La Oroya produced 109,561 t of refined lead in the first 11 months of 2004, up 7% from that of a year earlier (Platts Metals Week, 2005).

The National Defense Stockpile aggregated cash disposal (sale) of lead in January, under the monthly Basic Ordering Agreement DLA-Lead-005, was 3,850 t (4,245 short tons), with an approximate value of $3.8 million (Defense National Stockpile Center, 2005).

References Cited

Antaike, 2005, Market Commentary—Lead in December: Antaike, China Metal Market – Lead & Zinc, Tin Monthly, no. 98, January, p. 1-2.

CRU International Ltd., 2005, CRU Monitor—Lead: CRU International Ltd., January, 12 p.

Defense National Stockpile Center, 2005, Stockpile announces lead sales for January 2005: Fort Belvoir, VA, Defense National Stockpile Center news release, February 7, 1 p.

Platts Metals Week, 2005, Partial shutdown to stunt La Oroya 2005 zinc output: Platts Metals Week, v. 76, no. 3, January 17, p. 9.

Ryan's Notes, 2005a, For sale sign on secondary lead smelters: Ryan's Notes, v. 11, no. 4, January 24, p. 4.

Ryan's Notes, 2005b, Nordenham no easy sale: Ryan's Notes, v. 11, no. 5, January 31, p. 5.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES[1]

(Metric tons, lead content, unless otherwise specified)

		2004			
	2003	January	December	January - December	2005 January
Production:					
Mine (recoverable)	449,000	33,400	31,800	429,000	28,200
Primary refinery	245,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,140,000	91,900	93,200	1,120,000	93,300
Estimated	--	928	942	11,300 r	942
Recovered from copper-base scrap e	11,400	1,250	1,250	15,000	1,250
Total secondary	1,150,000	94,000	95,400	1,140,000	95,500
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	107,000	82,600	66,000 r	65,600 r	66,500
Imports for consumption:					
Ore and concentrate	6	--	--	3	NA
Refined metal	175,000	13,000	18,500	196,000	NA
Consumption:					
Reported	1,390,000	116,000	116,000 r	1,370,000	114,000
Undistributed e	--	3,580	3,570 r	42,300	3,510
Total	1,390,000	119,000	119,000	1,410,000	117,000
Exports:					
Ore and concentrate	253,000	1,810	12,300	279,000	NA
Bullion	593	8	24	222	NA
Wrought and unwrought lead	123,000	13,200	7,330	76,700	NA
TEL/TML preparations, based on lead compounds	517	35	117	625	NA
Exports (gross weight): Scrap	92,800	4,390	4,410	51,100	NA
Platts Metals Week North American producer price (cents per pound)	43.76	46.86	60.73	55.14	60.66

eEstimated. rRevised. NA Not available. -- Zero.

[1]Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price	LME		Sterling exchange rate
	cents/lb	$/metric ton	£/metric ton	dollars/£
2004:				
October	60.60	931.91	515.39	1.808175
November	60.70	967.26	519.84	1.860680
December	60.73	974.39	505.22	1.928639
Year	55.14	885.95	483.26	1.832475
2005:				
January	60.66	952.38	506.66	1.879725

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP[1]

(Metric tons, gross weight)

Item	Stocks December 31, 2004	Net receipts	Consumption	Stocks January 31, 2005
Battery-lead	12,200	97,100	96,600	12,700
Soft lead	W	W	W	W
Drosses and residues	1,830	1,470	1,460	1,840
Other[2]	1,360	1,930	2,020	1,260
Total	15,400	100,000	100,000	15,800
Percent change from preceding month	XX	+33.7	+33.2	+18.0

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED
FROM LEAD-BASE SCRAP IN JANUARY 2005[1]

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	69,000	--	--
Remelt lead	W	W	W
Antimonial lead	23,900	W	W
Other[2]	W	W	--
Total lead-base	93,300	39	342

W Withheld to avoid disclosing company proprietary data; included in "Total."
-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES[1]

(Metric tons, lead content)

Use	2003	2004			2005
		November	December	January - December	January
Metal products:					
Ammunition, shot and bullets	48,800	3,850	3,460 r	51,500 r	3,850
Brass and bronze, billet and ingots	2,810	194	194	2,150	194
Cable covering, power and communication and calking lead, building construction	4,790	317	416	4,270	484
Casting metals	31,700	2,780	2,780	33,400	2,780
Sheet lead, pipes, traps and other extruded products	25,900	1,990	2,110	24,000	2,210
Solder	6,310	112	66	1,460	111
Storage batteries, including oxides	1,170,000	97,100 r	97,200	1,170,000	97,100
Terne metal, type metal, and other metal products[2]	23,200	1,260	3,750 r	17,900 r	1,260
Total metal products	1,310,000	108,000	110,000 r	1,300,000	108,000
Other oxides and miscellaneous	78,300	5,640 r	5,650 r	67,300 r	5,620
Total reported	1,390,000	113,000 r	116,000 r	1,370,000	114,000
Undistributed[e]	--	3,500	3,570 r	42,300	3,510
Grand total	1,390,000	117,000	119,000 r	1,410,000	117,000

[e]Estimated. [r]Revised. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

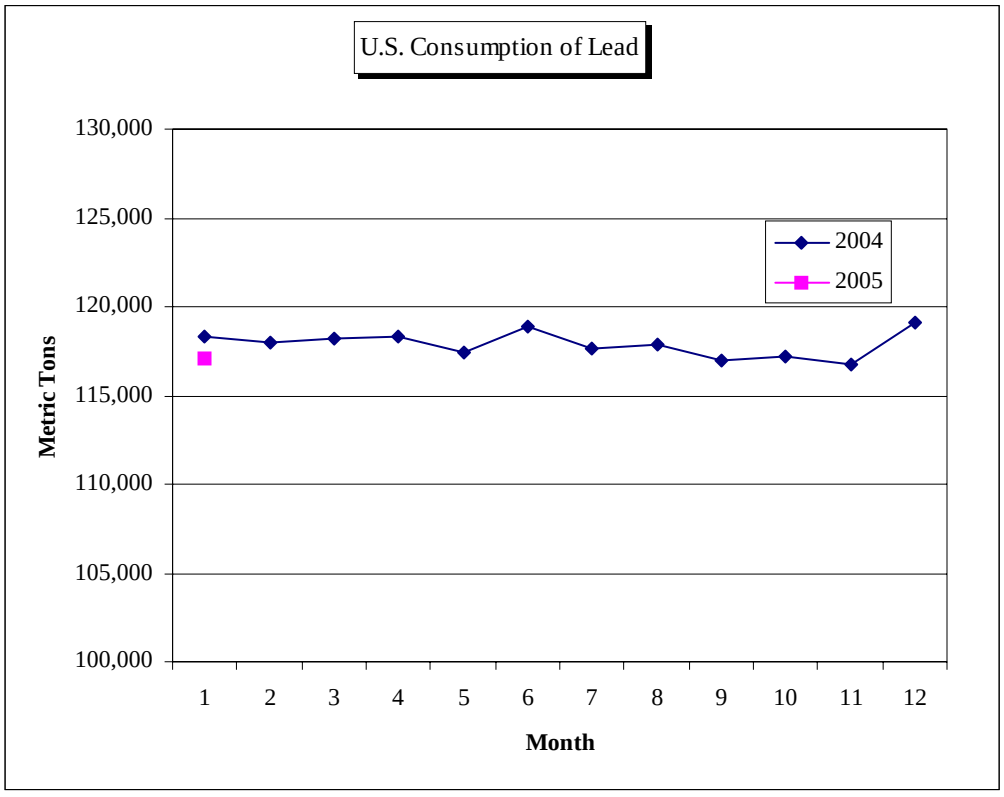

TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS,
AND CONSUMPTION OF LEAD[1]

(Metric tons, lead content)

Type of material	Stocks December 31, 2004	Net receipts	Consumption	Stocks January 31, 2005
Soft lead	34,100 r	63,500	63,500	34,100
Antimonial lead	16,200	31,300	30,800	16,700
Lead alloys	W	19,100	19,100	W
Copper-base scrap	W	W	W	W
Total	66,000 r	114,000	113,000	66,500

rRevised.
W Withheld to avoid disclosing company proprietary data; included in "Total."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS[1]

(Metric tons)

		2004		
	2003	November	December	January - December
Lead content:				
Ore and concentrates	292,000	12,100 r	12,300	291,000
Bullion	129	113	24	246
Materials excluding scrap	82,400	6,390	7,330	84,100
TEL/TML preparations, based on lead compounds	1,020	22	117	742
Total	375,000	19,600	19,700	376,000
Gross weight: Scrap	56,300	5,140	4,410	55,600

rRevised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS OF LEAD BY TYPE OF MATERIAL AND BY COUNTRY OF ORIGIN[1]

(Metric tons, lead content)

	General imports				Imports for consumption			
		2004				2004		
Type/Country	2003	November	December	Year	2003	November	December	Year
Base bullion:								
Argentina	5	--	--	--	5	--	--	--
Germany	1	--	--	--	1	--	--	--
Mexico	--	--	--	3	--	--	--	3
Total	6	--	--	3	6	--	--	3
Pigs and bars:								
Australia	10,100	--	--	--	107	731	--	13,700
Canada	167,000	19,200	17,200	166,000	167,000	19,200	17,200	166,000
China	1	--	--	2	1		--	2
Germany	--	--	30	311	--	--	30	311
Mexico	8,270	248	247	8,720	8,270	248	247	8,720
Other	259	20	961	6,720	259	20	961	6,850
Total	186,000	19,400	18,500	182,000	175,000	20,200	18,500	196,000
Grand total	186,000	19,400	18,500	182,000	175,000	20,200	18,500	196,000

-- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.